

REMARKS

In response to the Office Action mailed August 9, 2005, Applicants respectfully request reconsideration. To further the prosecution of this application, each of the issues raised in the Office Action is addressed herein.

Claims 1 to 42 are pending in this application, of which claims 1, 5, 7, 8, 9, 13, 15, 18, 20, 21, 23, 26, 28, 29, 30, 33, 35, 38, 40 and 41 are independent claims. By this amendment, Applicants have amended claims 1, 5, 7, 8, 9, 13, 15, 18, 20, 21, 23, 26, 27, 28, 29, 30, 33, 35, 38, 40 and 41. No new matter is added. The application as now presented is believed to be in allowable condition.

A. Claim Rejections under 35 U.S.C. §112

On page 2 of the Office Action, claims 21, 22, 41, and 42 were rejected under 35 U.S.C. §112, second paragraph, for allegedly being indefinite. Applicants respectfully traverse these rejections.

The Examiner contends that the recitation in claims 21 and 41, which reads “to absorb energy that would otherwise be reflected,” is vague. Applicants disagree. The Examiner appears to interpret the claim language regarding “energy” to refer to illumination or light. However, the term “energy” as used in the indicated claims clearly relates to the electrically conductive tracks (e.g., the presence of electrical voltage or current on the electrically conductive tracks), and not to illumination or light. While Applicants do not believe that the language of the claims as originally presented is vague, Applicants nonetheless have amended claims 21 and 41 to explicitly indicate that the energy in question is “electrical energy,” so as to address any concerns the Examiner might have in this regard.

In view of the foregoing, the rejections of claims 21 and 41 under 35 U.S.C. §112, second paragraph, should be withdrawn. Claims 22 and 42 depend from claims 21 and 41, respectively, and the rejections of claims 22 and 42 similarly should be withdrawn.

B. Allowable Subject Matter

Applicants note with appreciation that on page 11 of the Office Action, claims 5, 7, 8, 13-20, 26, 28, 29, and 33-40 are indicated as reciting allowable subject matter, and would

be allowable if re-written in independent form to include all of the limitations of the base claim and any intervening claims. Similarly, claims 21, 22, 41 and 42 would be allowable once the rejections under 35 U.S.C. §112, second paragraph, are overcome, and if re-written in independent form to include all of the limitations of the base claim and any intervening claims.

Accordingly, while not acceding to the propriety of the rejections of any base claim or intervening dependent claims, and solely to accept the subject matter deemed allowable by the Examiner, claims 5, 7, 8, 13, 15, 18, 20, 21, 26, 28, 29, 33, 35, 38, 40 and 41 have been re-written in independent form to include all of the limitations of their respective base claims and any intervening claims. Each of claims 14, 16, 17, 19, 22, 34, 36, 37, 39 and 42 depends from one of these new independent claims, and is allowable based at least upon its dependency. Applicants explicitly reserve the right to pursue (e.g., in one or more continuation applications) the subject matter of the claims prior to any amendments herein.

C. Claim Rejections under 35 U.S.C. §103

On page 2 of the Office Action, claims 1-4, 6, 9-12, 23-25, 27, and 30-32 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Michael et al. (U.S. Patent No. 4,656,398) in view of Phares (U.S. Patent No. 5,420,482). Applicants respectfully traverse these rejections as improper.

1. The Combination of Michael and Phares is Improper

As set forth in MPEP §2143, three criteria must be met in order to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the cited reference(s) or in the knowledge generally available to one of ordinary skill in the art, to modify the cited reference(s) or to combine reference teachings (if multiple references are cited). Second, there must be a reasonable expectation of success. The teaching or suggestion to modify the reference(s) or to combine reference teachings, as well as the reasonable expectation of success, must both be found in the prior art and not based on Applicants' disclosure. Third, the prior art reference(s), when viewed as a whole, must teach or suggest all of the claimed features. Failure to meet any one of these criteria – a

teaching or suggestion of all claim elements, a specific suggestion or motivation to modify or combine the prior art, and a reasonable expectation of success – is sufficient to render an obviousness rejection improper.

In view of the foregoing, the combination of Michael and Phares clearly is improper. First, there is no suggestion or motivation to combine the references and there is no reasonable expectation of success in so doing – in fact, as discussed in detail below, the Phares disclosure essentially teaches away from any viable combination with Michael. Moreover, the Michael and Phares references, alone or in combination, fail to teach or suggest all of the recited features of Applicants' claims. Accordingly, any claim rejection based on the combination of Michael and Phares should be withdrawn.

a. Michael (U.S. Patent No. 4,656,398)

Michael is directed to a lighting assembly including an incandescent bulb, wherein the lighting assembly is adapted for use with an overhead track lighting system (col. 3, lines 15-19; lines 35-37). The track lighting system to which Michael's lighting assembly is attached is illustrated in Michael's Fig. 3, for example, which shows a rigid track construction that facilitates power distribution and control (e.g., dimming) of a lighting assembly attached to the track system (col. 3, lines 37-55; col. 6, lines 4-16). In particular, the track system includes a strip of mylar secured to a rigid metal or plastic housing, wherein the strip of mylar includes multiple electrical contact strips extending in parallel along a length of the track. These electrical contact strips establish electrical contact with a lighting assembly coupled to the track at any point via an electrical adaptor assembly (col. 6, lines 10-14).

In addition to a conventional incandescent bulb to provide illumination, Michael's lighting assembly also includes decorative ribs attached to an exterior surface of the lighting assembly housing (col. 5, lines 62-64; Fig 1, reference characters 72, 40, 54, 60 and 62). Each of the decorative ribs is formed of a translucent material and includes one or more LEDs which cause the rib to glow in a red, green or yellow color when the LEDs are appropriately energized (col. 5, lines 64-65; col. 6, lines 8-12). As shown in Fig. 1, these decorative ribs may be positioned circumferentially around different housing sections of the

lighting assembly, and ribs disposed on different housing sections may be independently controlled to glow a particular color (i.e., red, green or yellow) to produce a variety of visual effects (col. 6, lines 23-25; col. 7, lines 20-26; col. 8, lines 54-66). It should be appreciated from the Michael disclosure, however, that the colored glow provided by the decorative LED ribs disposed on the lighting assembly clearly does not provide any significant illumination, and is merely for decorative purposes. Instead, it is explicitly the role of the incandescent bulb 34 shown in Fig. 2 to provide appreciable illumination from Michael's lighting assembly (col. 7, line 65 – col. 8, line 14).

b. Phares (U.S. Patent No. 5,420,482)

Phares is directed to an ornamental lighting system for decorative lighting such as Christmas tree lighting and display signs for advertising or other purposes (col. 7, lines 55-60; col. 8, lines 50-53).

In the system of Phares, a number of small lighting modules (or “control units”), each containing one red, one green and one blue light source, are coupled together at spaced intervals via a flexible ribbon cable (i.e., so that they may be conveniently strung around a Christmas tree, for example) (See Phares, Figs. 1 and 7, col. 2, lines 43-45). The cable is also coupled at one end to a control system to provide power, clock and data signals to the respective control units of the lighting modules attached to the cable.

It is particularly noteworthy in Phares that the control units of the small lighting modules are connected in a *series* fashion along the flexible ribbon cable (col. 2, lines 51-52, emphasis added; col. 4, lines 63 - col. 5, line 24; Figs. 1 and 4). Stated differently, control information provided by a control system at one end of the flexible cable travels along the cable and is passed sequentially from one lighting module to another.

For example, as shown in Phares' Fig. 7, the control unit 44 of each lighting module 200 is connected to the four conductor ribbon cable 238 via electrical connectors 52 and 56 (col. 8, lines 11-13). In particular, “incoming signals” are coupled from the cable to the control unit of a given lighting module via the connectors 56, and “outgoing signals” are in turn coupled from the control unit of the lighting module back to the cable via the connectors 56 in a “make and break” fashion (col. 8, lines 29-33). Accordingly, if for any

reason a control unit of a given lighting module is removed from the ribbon cable, subsequent lighting modules along the cable will not receive any control information from the control system.

In Phares, each lighting module coupled to the flexible ribbon cable can be controlled individually and independently of other lighting modules by virtue of such series connections, as well as an addressable configuration that allows specific control data to be received only by one or more predetermined lighting modules. Thus, different lighting modules of Phares' lighting system may be configured to generate different colors of light at any given time so as to provide decorative visual effects, for example, in connection with a Christmas tree.

c. The Examiner's Stated Basis for Combining Michael and Phares is Improper

On page 3 of the Office Action, the Examiner contends that:

Michael essentially discloses the claimed invention but does not explicitly disclose a plurality of lighting fixtures. However it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to render larger illumination coverage. For instance, Phares teaches a track comprising a plurality of lighting fixtures (44) in order to provide a decorative lighting [sic] and illuminated display signs (See abstract). It would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to provide decorative lighting.

The Examiner's reasoning above is legally untenable for several reasons.

First, Phares clearly does not teach a "track" as alleged by the Examiner. Nowhere in the reference does Phares disclose or remotely suggest a track-based implementation for supporting multiple lighting units, as would be readily appreciated by one of ordinary skill in the art. As discussed above, indeed Michael refers to a track lighting system, which is shown in part in Michael's Fig. 3. However, there is absolutely no such teaching or suggestion in Phares that is even remotely similar to a lighting "track" as would be conventionally understood by one of skill in the art.

Second, the Examiner alleges that “it would have been obvious to one of ordinary skill in the art to provide a plurality of lighting fixtures in Michael in order to *render larger illumination coverage*” (emphases added). Two sentences later, the Examiner asserts that allegedly “it would have been obvious to one of ordinary skill in the art to provide a plurality of fixtures in Michael as taught by Phares in order to *provide decorative lighting*” (emphasis added). Thus, the Examiner has explicitly demonstrated some confusion over a motivation to combine these two references - first, the motivation to combine purportedly relates to *larger illumination coverage*; then, the motivation to combine purportedly relates to *providing decorative lighting*.

These two goals are inconsistent when the Michael and Phares references are viewed as a whole. Specifically, the goal of Phares is indeed to provide decorative lighting; however, the Phares system clearly is incapable of providing any appreciable illumination, let alone “rendering larger illumination coverage.” Rather, the Phares system plainly is intended to be viewed directly to merely provide visually pleasing decorative effects, but not to provide substantial illumination to any environment. Thus, one of skill in the art seeking to modify the Michael reference (which is clearly directed to providing illumination, with some secondary decorative aspects) would not look to Phares so as to provide Michael with the ability to “*render larger illumination coverage*,” as the Examiner contends, because Phares is incapable of providing such a benefit to Michael’s lighting system. Accordingly, the Examiner’s stated basis for combining Michael and Phares is improper.

There are, of course, other perhaps more salient reasons for the impropriety of such a combination. For example, indeed the system of Michael is described as a track lighting system, which is conventionally understood to include an elongate *rigid track structure* to which one or more lighting fixtures may be coupled, wherein power and electrical signals are provided along the track structure in an identical, *parallel* fashion to any lighting fixtures coupled to the track (e.g., see Michael Fig. 3). In stark contrast, the Phares disclosure in significant part describes a decorative lighting system having a number of independently and individually controllable *serially-connected* lighting units coupled to a *flexible ribbon cable*. Essentially, the lighting system described in Phares substantially teaches away from the implementation described in Michael. Again, in Phares, serially-connected lighting units are

joined to a flexible cable, whereas in Michael lighting units are attached in parallel to a rigid track structure.

Thus, there plainly is no motivation to combine the teachings of these two references in any manner, and there certainly can be no expectation of success in somehow combining random features from the two references. To further this point, it is noteworthy that the Examiner has made no effort whatsoever to describe how different features from the Michael and Phares references reasonably could be combined with success to arrive at Applicants' claimed apparatus and methods.

In sum, the Examiner has failed to meet at least two of the criteria set forth in MPEP §2143 to establish a *prima facie* case of obviousness - namely, a suggestion or motivation to combine reference teachings, and a reasonable expectation of success, are completely lacking from the Examiner's assertions. Again, failure to meet either of these criteria is sufficient to render an obviousness rejection improper. Accordingly, all claim rejections under 35 U.S.C. §103 based on the combination of Michael and Phares should be withdrawn.

2. The Combined Teachings of Michael and Phares Fail to Disclose All Claim Limitations

Even if the combination of Michael and Phares were proper, which it is not, the combination fails to disclose all of the features of Applicants' independent claims 1 and 23. Hence, the third criterion set forth in MPEP §2143 to establish a *prima facie* case of obviousness - namely, that the combination of references, when viewed as a whole, must teach or suggest all of the claimed features - also is not met.

Claim 1, as currently pending, is directed to a track lighting apparatus, comprising an essentially rigid linear or curvilinear-shaped housing, and at least one pair of essentially rigid electrically conductive tracks mechanically coupled to the housing and configured to provide power and data to a plurality of lighting fixtures when the fixtures are coupled to the at least one pair of electrically conductive tracks. The apparatus also comprises at least one LED-based lighting fixture mechanically coupled to the housing, electrically coupled to the

at least one pair of electrically conductive tracks, and configured to be responsive to the data. Claim 1 also recites that the LED-based lighting fixture includes a plurality of LEDs configured to generate sufficient visible light so as to provide significant ambient illumination in an environment to be occupied by an observer of the ambient illumination.

Claim 23, as currently pending, is directed to a track lighting method, comprising an act of providing power and data to a plurality of lighting fixtures via at least one pair of essentially rigid electrically conductive tracks that are mechanically coupled to an essentially rigid linear or curvilinear-shaped housing. The plurality of lighting fixtures include at least one LED-based lighting fixture mechanically coupled to the housing, electrically coupled to the at least one pair of electrically conductive tracks, and configured to be responsive to the data, and the at least one LED-based lighting fixture includes a plurality of LEDs. The method of claim 23 further comprises an act of generating sufficient visible light from the plurality of LEDs, in response to at least the data, so as to provide significant ambient illumination in an environment to be occupied by an observer of the ambient illumination.

Neither Michael nor Phares, alone or in combination, discloses or suggests generating sufficient visible light from a plurality of LEDs so as to provide significant ambient illumination in an environment to be occupied by an observer of the ambient illumination, as recited in claims 1 and 23. As discussed above, Michael employs LEDs merely for ornamental or decorative purposes to provide “glowing ribs” along an outer surface of a lighting fixture housing. Specifically, it is the incandescent light bulb of Michael’s apparatus, and not the LEDs, that provides illumination. Likewise, the small lighting modules of Phares are merely intended for ornamental purposes, such as decorating a Christmas tree - nowhere in the reference does Phares explicitly disclose LEDs, let alone a lighting system employing LEDs, that could be reasonably employed to provide significant ambient illumination in an environment.

In view of the foregoing, no combination of Michael and Phares could possibly teach or suggest all of the features recited in Applicants’ independent claims 1 and 23. For this additional reason, the combination of Michael and Phares is improper. Since the combination of Michael and Phares is improper, and furthermore since claims 1 and 23

patentably distinguish over Michael and Phares, either alone or in combination, the rejection of claims 1 and 23 should be withdrawn.

Claims 2-4, 6, 10-12, 24, 25, 27, 31, and 32 depend from one of claims 1 and 23, and are allowable based at least upon their dependency.

With respect to independent claims 9 and 30, the combination of Michael and Phares also fails to disclose all of the features of these claims.

Claim 9 is directed to a track lighting apparatus, comprising an essentially rigid linear or curvilinear-shaped housing, and at least one pair of essentially rigid electrically conductive tracks mechanically coupled to the housing and configured to provide power and data to a plurality of lighting fixtures when the fixtures are coupled to the at least one pair of electrically conductive tracks. The apparatus also comprises at least one LED-based lighting fixture mechanically coupled to the housing, electrically coupled to the at least one pair of electrically conductive tracks, and configured to be responsive to the data. Claim 9 also recites that the at least one pair of electrically conductive tracks includes only one pair of electrically conductive tracks to provide both the power and the data in parallel to the plurality of lighting fixtures.

Claim 30 is directed to a track lighting method, comprising an act of: A) providing power and data to a plurality of lighting fixtures via at least one pair of essentially rigid electrically conductive tracks that are mechanically coupled to an essentially rigid linear or curvilinear-shaped housing. The plurality of lighting fixtures includes at least one LED-based lighting fixture mechanically coupled to the housing, electrically coupled to the at least one pair of electrically conductive tracks, and configured to be responsive to the data. Claim 30 also recites that the at least one pair of electrically conductive tracks includes only one pair of electrically conductive tracks, and that the act A) includes an act of providing both the power and the data in parallel to the plurality of lighting fixtures only via the one pair of electrically conductive tracks.

Neither Michael nor Phares discloses or suggests only one pair of electrically conductive tracks for providing both power and data in parallel to a plurality of lighting fixtures. Instead, Michael clearly requires three pairs of electrically conductive tracks (i.e., a total of six electrically conductive tracks) just to provide control signals to the glowing LED

ribs attached to the housing of the lighting fixture. Moreover, Michael further requires another three conductive tracks to provide power to the incandescent light bulb; hence, in total, Michael requires nine conductive tracks. Similarly, Phares clearly requires two pairs of conductors, namely one pair of conductors to provide power and another second pair providing DATA signals, to interconnect multiple lighting units (Phares Fig. 1, col. 2, lines 51-57).

In view of the foregoing, it is clear that both Michael and Phares fail to disclose or suggest providing both power and data in parallel to the plurality of lighting fixtures only via one pair of electrically conductive tracks. Thus, claims 9 and 30 patentably distinguish over the combination of Michael and Phares, and are in condition for allowance.

D. General Comments on Dependent Claims

Since each of the dependent claims depends from a base claim that is believed to be in condition for allowance, Applicants believe that it is unnecessary at this time to further argue the allowability of each of the dependent claims individually. However, Applicants do not necessarily concur with the interpretation of any dependent claims as set forth in the Office Action, nor do Applicants concur that the basis for the rejection of any of the dependent claims is proper. Therefore, Applicants reserve the right to specifically address the patentability of the dependent claims in the future, if deemed necessary.

E. Information Disclosure Statements

On page 11, the Office Action indicates that all court cases cited in an Information Disclosure Statement dated December 13, 2004 have been withdrawn from consideration because “they are neither book, magazine, journal, serial, symposium nor catalog.”

In view of MPEP §2001.06(c), Applicants respectfully request consideration of all cited information, including the so-called “court cases,” indicated on the Information Disclosure Statement dated December 13, 2004.

Specifically, pursuant to MPEP §2001.06(c), Applicants bring to the Examiner’s attention that U.S. Patent No. 6,016,038 assigned to Color Kinetics, Inc. (also the assignee of the present application) has been involved in litigation. Applicants acknowledge the duty

to disclose to the U.S. Patent Office material information that may arise from this litigation, including evidence of possible prior public use or sales, questions of inventorship, prior art, allegations of “fraud,” “inequitable conduct,” and “violation of duty of disclosure,” or any assertion which is contradictory to assertions made to the Examiner during prosecution of the present application.

To this end, Applicants indicated on the PTO Form-1449 accompanying the December 13, 2004 Information Disclosure Statement various litigation documents. Applicants make no representation that these documents provide information material to the examination of the present application. Rather, Applicants make these documents of record in the present application primarily for completeness to facilitate the Examiner’s understanding of the nature of these litigations.

The Examiner is urged to formally consider these documents and form his or her own conclusion regarding the relevance of the information contained in these documents. Applicants respectfully request that the Examiner initial and return to the Applicants the PTO Form-1449 indicating review and consideration of all of the references cited thereon, including the documents relating to litigation.

F. Conclusion

It is respectfully believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment set forth in the Office Action does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Furthermore, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify any concession of unpatentability of the claim prior to its amendment.

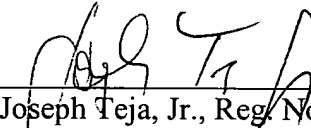
In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the

Examiner is requested to call the Applicants' representative at the telephone number indicated below to discuss any outstanding issues relating to the allowability of the application.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 06-1448, reference CKB-048.02.

Respectfully submitted,

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